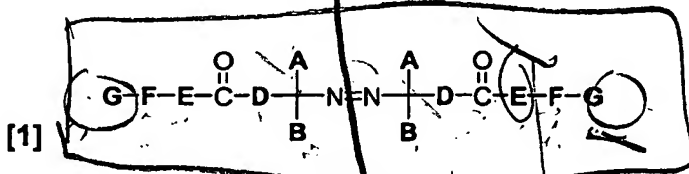


We claim:

1. A dual function UV absorber selected from the group consisting of



where:

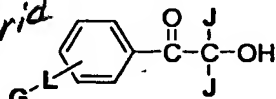
- A is  $-\text{CH}_3$  or  $-\text{CH}_2\text{CH}_3$ .  $\rightarrow$  "CH<sub>2</sub>"
- B is  $-\text{CN}$ ,  $-\text{CO}_2\text{H}$ ,  $-\text{COH}$ ,  $-\text{COCH}_3$ ,  $-\text{CO}_2\text{CH}_3$ ,  $-\text{SO}_3\text{H}$ ,  $-\text{CF}_3$ , or  $-\text{NO}_2$  when D is  $(\text{CH}_2)_n$ , and  $-\text{CH}_3$  or  $-\text{CH}_2\text{CH}_3$  when D is nothing.
- D is nothing or  $(\text{CH}_2)_n$ ,  $n = 1-10$
- E is O or NH,  $\text{NCH}_3$ , or  $\text{NCH}_2\text{CH}_3$
- F is nothing,  $(\text{CH}_2)_x$  or  $(\text{CH}_2\text{CH}_2\text{O})_x\text{CH}_2\text{CH}_2$  where  $x = 1-10$ .
- G is  $-\text{R}$ ,  $-\text{OR}$ ,  $-\text{NHR}$ ,  $-\text{NRR}'$ ,  $-\text{CO}_2\text{R}$ , or  $-\text{COR}$ , where R = a benzotriazole or benzophenone UV absorber, and  $\text{R}' = -\text{CH}_3$  or  $-\text{CH}_2\text{CH}_3$ ;

proviso

333.4/5, 18 = rid

46.150.18 = rid

[2]



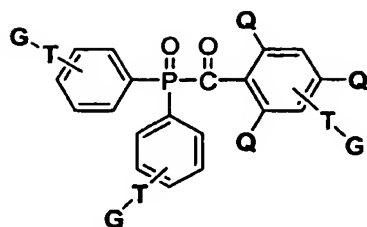
where:

- J is  $\text{CH}_3$  or  $\text{CH}_2\text{CH}_3$ .
- L is nothing,  $(\text{CH}_2)_y$  or  $(\text{CH}_2\text{CH}_2\text{O})_y$  where  $y = 1-10$ .
- G is  $-\text{R}$ ,  $-\text{OR}$ ,  $-\text{NHR}$ ,  $-\text{NRR}'$ ,  $-\text{CO}_2\text{R}$ , or  $-\text{COR}$ , where R = a benzotriazole or benzophenone UV absorber, and  $\text{R}' = -\text{CH}_3$  or  $-\text{CH}_2\text{CH}_3$ ;

25

CH<sub>2</sub>-

[3]

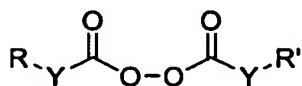


where Q is -H, -CH<sub>3</sub>, -CH<sub>2</sub>CH<sub>3</sub>, -CH(CH<sub>3</sub>)CH<sub>3</sub>, or -C(CH<sub>3</sub>)<sub>3</sub>.

T is nothing, -(CH<sub>2</sub>)<sub>z</sub>, or -(OCH<sub>2</sub>CH<sub>2</sub>)<sub>z</sub>, where z = 1 - 10

G is -R, -OR, -NHR, -NRR', -CO<sub>2</sub>R, or -COR, where R = a benzotriazole or benzophenone UV absorber, and R' = -CH<sub>3</sub> or -CH<sub>2</sub>CH<sub>3</sub>;

[4]



where Y = nothing or O; R = a benzotriazole or benzophenone UV absorber;

R' = a benzotriazole or benzophenone UV absorber; -(CH<sub>2</sub>)<sub>n</sub>H (n = 1-18); -

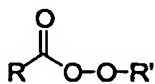
CH(CH<sub>3</sub>)CH<sub>3</sub>; -C(CH<sub>3</sub>)<sub>3</sub>; -C<sub>6</sub>H<sub>5</sub>; -CH(CH<sub>3</sub>)CH<sub>2</sub>CH<sub>3</sub>; -C(CH<sub>3</sub>)<sub>2</sub>CH<sub>2</sub>C(CH<sub>3</sub>)<sub>3</sub>; -

C(CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>4</sub>H; -C(CH<sub>2</sub>CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>4</sub>H; -C(CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>5</sub>H; -

C(CH<sub>2</sub>CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>5</sub>H; -C(CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>6</sub>H; -C(CH<sub>2</sub>CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>6</sub>H; -

CH<sub>2</sub>CH(CH<sub>2</sub>CH<sub>3</sub>)(CH<sub>2</sub>)<sub>4</sub>H; or ;

[5]



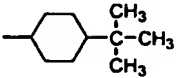
where R = a benzotriazole or benzophenone UV absorber; R' = a

benzotriazole or benzophenone UV absorber; -(CH<sub>2</sub>)<sub>n</sub>H (n = 1-18); -

CH(CH<sub>3</sub>)CH<sub>3</sub>; -C(CH<sub>3</sub>)<sub>3</sub>; -C<sub>6</sub>H<sub>5</sub>; -CH(CH<sub>3</sub>)CH<sub>2</sub>CH<sub>3</sub>; -C(CH<sub>3</sub>)<sub>2</sub>CH<sub>2</sub>C(CH<sub>3</sub>)<sub>3</sub>; -

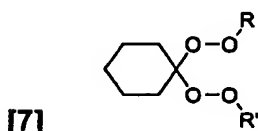
C(CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>4</sub>H; -C(CH<sub>2</sub>CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>4</sub>H; -C(CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>5</sub>H; -

$C(CH_2CH_3)_2(CH_2)_5H$ ;  $-C(CH_3)_2(CH_2)_6H$ ;  $-C(CH_2CH_3)_2(CH_2)_6H$ ; -

$CH_2CH(CH_2CH_3)(CH_2)_4H$ ;  $-C(CH_3)_2C_6H_5$ ; or  ;

5 [6] R-O-O-R

where R = a benzotriazole or benzophenone UV absorber; R' = H, a benzotriazole or benzophenone UV absorber;  $-(CH_2)_nH$  (n = 1-18); -  
 $CH(CH_3)CH_3$ ;  $-C(CH_3)_3$ ;  $-CH(CH_3)CH_2CH_3$ ;  $-C(CH_3)_2CH_2C(CH_3)_3$ ; -  
 10  $C(CH_3)_2(CH_2)_4H$ ;  $-C(CH_2CH_3)_2(CH_2)_4H$ ;  $-C(CH_3)_2(CH_2)_5H$ ; -  
 $C(CH_2CH_3)_2(CH_2)_5H$ ;  $-C(CH_3)_2(CH_2)_6H$ ;  $-C(CH_2CH_3)_2(CH_2)_6H$ ; -  
 $CH_2CH(CH_2CH_3)(CH_2)_4H$ ; or  $-C(CH_3)_2C_6H_5$ ; and



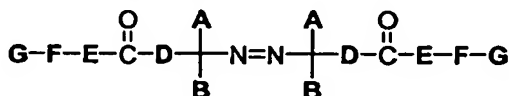
15

where R = a benzotriazole or benzophenone UV absorber;

R' = H; a benzotriazole or benzophenone UV absorber;  $(CH_2)_nH$  (n = 1-  
 18);  $CH(CH_3)CH_3$ ;  $C(CH_3)_3$ ;  $CH(CH_3)CH_2CH_3$ ;  $C(CH_3)_2CH_2C(CH_3)_3$ ;  
 $C(CH_3)_2(CH_2)_4H$ ;  $C(CH_2CH_3)_2(CH_2)_4H$ ;  $C(CH_3)_2(CH_2)_5H$ ;  $C(CH_2CH_3)_2(CH_2)_5H$ ;  
 20  $C(CH_3)_2(CH_2)_6H$ ;  $C(CH_2CH_3)_2(CH_2)_6H$ ;  $CH_2CH(CH_2CH_3)(CH_2)_4H$ ; or  
 $C(CH_3)_2C_6H_5$ .

25

2. The dual function UV absorber of Claim 1 wherein the UV absorber has the formula:



where:

A is  $-\text{CH}_3$  or  $-\text{CH}_2\text{CH}_3$ .

B is  $-\text{CN}$ ,  $-\text{CO}_2\text{H}$ ,  $-\text{COH}$ ,  $-\text{COCH}_3$ ,  $-\text{CO}_2\text{CH}_3$ ,  $-\text{SO}_3\text{H}$ ,  $-\text{CF}_3$ , or  $-\text{NO}_2$  when D is  $(\text{CH}_2)_n$ , and  $-\text{CH}_3$  or  $-\text{CH}_2\text{CH}_3$  when D is nothing.

D is nothing or  $(\text{CH}_2)_n$ ,  $n = 1-10$

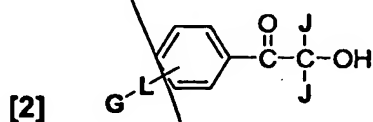
5 E is O or NH,  $\text{NCH}_3$ , or  $\text{NCH}_2\text{CH}_3$

F is nothing,  $(\text{CH}_2)_x$  or  $(\text{CH}_2\text{CH}_2\text{O})_x\text{CH}_2\text{CH}_2$  where  $x = 1-10$ .

G is  $-\text{R}$ ,  $-\text{OR}$ ,  $-\text{NHR}$ ,  $-\text{NRR}'$ ,  $-\text{CO}_2\text{R}$ , or  $-\text{COR}$ , where R = a benzotriazole or benzophenone UV absorber, and  $\text{R}' = -\text{CH}_3$  or  $-\text{CH}_2\text{CH}_3$ .

10

3. The dual function UV absorber of Claim 1 wherein the UV absorber has the formula:



15

where:

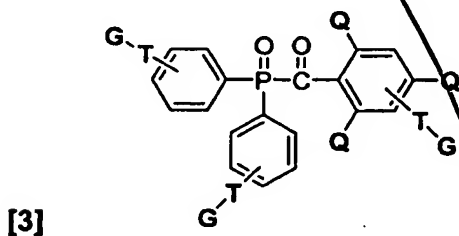
J is  $\text{CH}_3$  or  $\text{CH}_2\text{CH}_3$ .

L is nothing,  $(\text{CH}_2)_y$  or  $(\text{CH}_2\text{CH}_2\text{O})_y$  where  $y = 1-10$ .

20 G is  $-\text{R}$ ,  $-\text{OR}$ ,  $-\text{NHR}$ ,  $-\text{NRR}'$ ,  $-\text{CO}_2\text{R}$ , or  $-\text{COR}$ , where R = a benzotriazole or benzophenone UV absorber, and  $\text{R}' = -\text{CH}_3$  or  $-\text{CH}_2\text{CH}_3$ .

4. The dual function UV absorber of Claim 1 wherein the UV absorber has the formula:

25



16

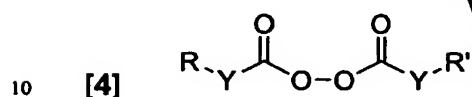
where Q is -H, -CH<sub>3</sub>, -CH<sub>2</sub>CH<sub>3</sub>, -CH(CH<sub>3</sub>)CH<sub>3</sub>, or -C(CH<sub>3</sub>)<sub>3</sub>.

T is nothing, -(CH<sub>2</sub>)<sub>z</sub>, or -(OCH<sub>2</sub>CH<sub>2</sub>)<sub>z</sub>, where z = 1 - 10

G is -R, -OR, -NHR, -NRR', -CO<sub>2</sub>R, or -COR, where R = a benzotriazole or benzophenone UV absorber, and R' = -CH<sub>3</sub> or -CH<sub>2</sub>CH<sub>3</sub>.

5

5. The dual function UV absorber of Claim 1 wherein the UV absorber has the formula:



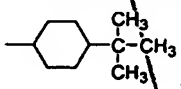
where Y = nothing or O; R = a benzotriazole or benzophenone UV absorber;

R' = a benzotriazole or benzophenone UV absorber; -(CH<sub>2</sub>)<sub>n</sub>H (n = 1-18); -

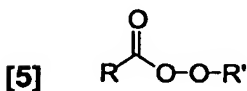
CH(CH<sub>3</sub>)CH<sub>3</sub>; -C(CH<sub>3</sub>)<sub>3</sub>; -C<sub>6</sub>H<sub>5</sub>; -CH(CH<sub>3</sub>)CH<sub>2</sub>CH<sub>3</sub>; -C(CH<sub>3</sub>)<sub>2</sub>CH<sub>2</sub>C(CH<sub>3</sub>)<sub>3</sub>; -

15 C(CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>4</sub>H; -C(CH<sub>2</sub>CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>4</sub>H; -C(CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>5</sub>H; -

C(CH<sub>2</sub>CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>5</sub>H; -C(CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>6</sub>H; -C(CH<sub>2</sub>CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>6</sub>H; -

CH<sub>2</sub>CH(CH<sub>2</sub>CH<sub>3</sub>)(CH<sub>2</sub>)<sub>4</sub>H; or 

20 6. The dual function UV absorber of Claim 1 wherein the UV absorber has the formula:



25 where R = a benzotriazole or benzophenone UV absorber; R' = a

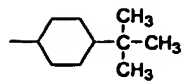
benzotriazole or benzophenone UV absorber; -(CH<sub>2</sub>)<sub>n</sub>H (n = 1-18); -

CH(CH<sub>3</sub>)CH<sub>3</sub>; -C(CH<sub>3</sub>)<sub>3</sub>; -C<sub>6</sub>H<sub>5</sub>; -CH(CH<sub>3</sub>)CH<sub>2</sub>CH<sub>3</sub>; -C(CH<sub>3</sub>)<sub>2</sub>CH<sub>2</sub>C(CH<sub>3</sub>)<sub>3</sub>; -

C(CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>4</sub>H; -C(CH<sub>2</sub>CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>4</sub>H; -C(CH<sub>3</sub>)<sub>2</sub>(CH<sub>2</sub>)<sub>5</sub>H; -

$C(CH_2CH_3)_2(CH_2)_5H$ ;  $-C(CH_3)_2(CH_2)_6H$ ;  $-C(CH_2CH_3)_2(CH_2)_6H$ ; -

$CH_2CH(CH_2CH_3)(CH_2)_4H$ ;  $-C(CH_3)_2C_6H_5$ ; or

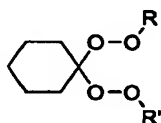


7. The dual function UV absorber of Claim 1 wherein the UV absorber has the formula:

[6]  $R-O-O-R$

where R = a benzotriazole or benzophenone UV absorber; R' = H, a benzotriazole or benzophenone UV absorber;  $-(CH_2)_nH$  (n = 1-18); -  
 $CH(CH_3)CH_3$ ;  $-C(CH_3)_3$ ;  $-CH(CH_3)CH_2CH_3$ ;  $-C(CH_3)_2CH_2C(CH_3)_3$ ; -  
 $C(CH_3)_2(CH_2)_4H$ ;  $-C(CH_2CH_3)_2(CH_2)_4H$ ;  $-C(CH_3)_2(CH_2)_5H$ ; -  
 $C(CH_2CH_3)_2(CH_2)_5H$ ;  $-C(CH_3)_2(CH_2)_6H$ ;  $-C(CH_2CH_3)_2(CH_2)_6H$ ; -  
 $CH_2CH(CH_2CH_3)(CH_2)_4H$ ; or  $-C(CH_3)_2C_6H_5$ .

8. The dual function UV absorber of Claim 1 wherein the UV absorber has the formula:



where R = a benzotriazole or benzophenone UV absorber;

R' = H; a benzotriazole or benzophenone UV absorber;  $(CH_2)_nH$  (n = 1-18);  $CH(CH_3)CH_3$ ;  $C(CH_3)_3$ ;  $CH(CH_3)CH_2CH_3$ ;  $C(CH_3)_2CH_2C(CH_3)_3$ ;  
 $C(CH_3)_2(CH_2)_4H$ ;  $C(CH_2CH_3)_2(CH_2)_4H$ ;  $C(CH_3)_2(CH_2)_5H$ ;  $C(CH_2CH_3)_2(CH_2)_5H$ ;  
 $C(CH_3)_2(CH_2)_6H$ ;  $C(CH_2CH_3)_2(CH_2)_6H$ ;  $CH_2CH(CH_2CH_3)(CH_2)_4H$ ; or  
 $C(CH_3)_2C_6H_5$ .

9. An ophthalmic lens material comprising a dual function UV absorber of

Claim 1

10. The ophthalmic lens material of Claim 9 wherein the dual function UV absorber is present in the ophthalmic lens material in an amount of 1 – 5 % (w/w).